

ENGINEERING OPERATIONS COMMITTEE MEETING MINUTES APRIL 29, 2021, 9:00 A.M. – 11:00 A.M. VIA TEAMS

Present: Carol Aldrich Mark Geib Will Thompson

Mark Bott Jason Gutting Brad Wieferich
Gregg Brunner Tony Kratofil Hal Zweng

Matt Chynoweth Ryan Mitchell Mark Dionise Kristin Schuster

Absent: Rebecca Curtis Brandy Solak Gorette Yung

Guests: Michael Eacker Ben Krom Jason Pittman

David Gauthier Rob Lippert Lindsey Renner Kevin Kennedy Val Napier Justin Schenkel

OLD BUSINESS

1. Approval of the March 25, 2021 Meeting Minutes – Tony Kratofil

ACTION: Approved

- 2. Michigan Department of Transportation (MDOT) New Materials and Products Jason Gutting
 - a. New Material Monthly Report of Data
 - Number of Submittals Received
 - Number of Submittals Accepted
 - Number of Submittals Not Accepted
 - ❖ Biannual Qualified Products List Revisions

ACTION: For information only.

NEW BUSINESS

1. Safety Topic: Why is choosing safety important to you? – Gregg Brunner

ACTION: For Information Only

2. New guidance for user delay caps to be used in pavement life-cycle cost analysis and alternate pavement bidding projects – Michael Eacker

ACTION: Tabled until the Michigan Concrete Association's (MCA) response is received

3. Pavement Type Selection: US-12 from west of Platt Road to Carpenter Road, Washtenaw County – Ben Krom

Issue Statement – Pavement Type Selection.

Route/Location: US-12 from West of Platt Road to Carpenter Road, Washtenaw County

Job Number: 200202 Control Section: 81031 Letting Date: 12/3/2021

Department policy requires that a Life Cycle Cost Analysis (LCCA) be used to determine the most cost-effective pavement design.

Major Issue(s) – None. The paving industries had no comments on this LCCA.

Background/History – Pavement selection was determined using the procedures outlined in the MDOT Pavement Selection Manual. Department policy requires that the pavement alternate with the lowest Equivalent Uniform Annual Cost (EUAC) be selected. Final pavement selection requires approval by the Engineering Operations Committee.

Recommendation(s) – Approve the pavement alternate with the lowest EUAC.

ACTION: Approved

4. Pavement Type Selection: I-696 from I-275 to Lahser Road, Oakland County – Ben Krom

Issue Statement – Pavement Type Selection.

Route/Location: I-696 from I-275 to Lahser Road, Oakland County

Job Number: 201222

Control Section: 63101 & 63102

Letting Date: 11/5/2021

Department policy requires that a LCCA be used to determine the most cost-effective pavement design.

Major Issue(s) – The Asphalt Pavement Association of Michigan (APAM) requested that this project move forward as an alternative pavement bidding (APB) project due to the extremely high user delay costs in the LCCA. Staff reviewed their request, even using a "capped" user delay cost value, and the LCCA results were still outside of APB range, so we denied APAM's request for APB. No further correspondence was received after our response.

Background/History – Pavement selection was determined using the procedures outlined in the MDOT Pavement Selection Manual. Department policy requires that the pavement alternate with the lowest EUAC be selected. Final pavement selection requires approval by the EOC.

Recommendation(s) – Approve the pavement alternate with the lowest EUAC.

ACTION: Approved

5. Use of project specific qualifications for replacement of Jackson and Mechanic Street bridges in the City of Jackson – Ryan Mitchell/Robert Lippert/Jason Pittman

Issue Statement – Request the use of project specific qualifications (PSQ) for replacement of Jackson and Mechanic Street bridges in the City of Jackson. The PSQ would utilize a Request for Qualifications (RFQ) process to shortlist the most qualified contractor teams to bid on the project through a traditional bid-build letting.

Project Goals include:

- Meet critical construction timeframes based on freight and passenger train service needs
- Closely coordinate with multiple railroads including Amtrak
- All permanent construction must be contained within the highly constrained existing railroad and city-owned roadway right of ways
- Closely coordinate with city of Jackson
- Minimize impacts to critical third-party utilities that will remain in place during construction
- Deliver project within MDOT's established budget

Anticipated Qualifications and Experience:

- Qualifications showing an effective team structure consisting of a rail contractor and bridge contractor and proposed communications to ensure the project can be delivered on time.
- Experience working within a constrained, active railroad corridor.

• Experience delivering two to four similar projects (not required to be rail projects) with expedited schedules that were delivered on time and budget. Include original/actual cost and schedule and justification for any projects that were over budget or delivered late.

The Innovative Contracting Unit reached out to the Michigan Infrastructure and Transportation Association (MITA) with preliminary information regarding the PSQ, citing the project goals and anticipated qualifications/experience above, and MITA does not have any concerns with this procurement strategy.

Work includes:

- Replacement of two railroad bridges on state-owned Michigan Line accelerated railroad corridors over Jackson Street (Railroad Mile Post 75.94) and Mechanic Street (Railroad Mile Post 75,79), City of Jackson, Jackson County.
- Reconstruction and vertical profile raise of the Blackstone Street railroad at-grade crossing and approaches.
- Reconstruction and a 3 ½-foot maximum vertical profile raise of the two (2) mainline railroad tracks to improve the vertical under clearance and reduce high load strikes at Jackson Street.
- Installation of approximately 1,300 lineal feet of new retaining wall to limit adjacent property impacts and minimize construction impact area.
- Reconstruction of approximately 500 lineal feet of failing concrete retaining wall separating the Jackson and Lansing Railroad Company and Michigan Line operations east of Mechanic Street.
- Construction of a pedestrian tunnel under the Michigan Line railroad corridor west of Mechanic Street for the Iron Belle Trail.
- Installation of new streetscape elements including lighting and pavement markings within the construction impact area.
- Replacement of municipal utilities.
- Replacement of sidewalk and roadway surfaces within the construction impact area.
- Other miscellaneous and safety items.

Project Cost: \$19.4M Letting Date: August 2021 Job Number: 204744 Control Section: 38000

Accelerated Bridge Construction (ABC) techniques are proposed to deliver this work. Micropile foundation systems, precast concrete bridge seats, a superstructure slide over Jackson Street and a superstructure crane in place over Mechanic Street are the major ABC techniques proposed.

Recommendation(s) – The Innovative Contracting Committee recommends approval to use Project Specific Qualifications.

ACTION: Approved

6. Updated Density Testing and Inspection Manual – David Gauthier

Issue Statement – Updated Density Testing and Inspection Manual (DTIM).

Major Issue(s) – Updated DTIM

Background/History – The DTIM is periodically reviewed and updated as necessary to remain current. Recently the density test reporting form (0582B) was revised to change the order of the columns to coincide with the order the nuclear gauge displays test results. The only significant change to the DTIM was to replace the existing example versions of form 0582B in the manual with the updated version (pages 69, 70 and 71).

The Federal Highway Association (FHWA) has approved the updated version of the DTIM.

The updated DTIM has been provided for this agenda item.

Recommendation(s) – Approve latest revisions to the DTIM.

ACTION: Approved

7. Approve latest revisions to the Soil Erosion and Sedimentation Control Manual – David Gauthier

Issue Statement – Updated the Soil Erosion and Sedimentation Control (SESC) Manual which must be approved by the Department of Environment, Great Lakes and Energy (EGLE) as a condition of Authorized Public Agency status.

Major Issue(s) – Updated the SESC Manual.

Background/History – The SESC Manual is periodically reviewed and updated as necessary to remain current. The existing SESC Manual was reviewed by appropriate region and central office staff and revisions were made as necessary to align with current practice and comply with PA 451, Part 91, Soil Erosion and Sedimentation Control. The draft version of the manual was distributed throughout the department for review and comment.

There were three significant revisions made to the SESC Manual as follows:

Revision 1. The training requirements were updated for the Construction Stormwater Operator (CSWO) and the comprehensive SESC Plan Review and Design (PRD) as provided

by EGLE (subsection 1.2.2). The CSWO training is required for those staff conducting inspections of SESC measures during construction. The PRD training is required for those staff with the responsibility for recommending SESC measures during plan development and authorizing plan revisions to the SESC measures during construction.

Revision 2. Language for the requirements for SESC inspections during the winter was copied from the Construction Manual and included in the SESC Manual (subsections 3.1.6, 3.1.7 and 3.1.8). This language originated from EGLE (then Department of Environmental Quality, Water Resources Division (WRD) Winter Construction Stormwater Policy and allows for suspension of SESC inspections when specific (cold) weather conditions exist.

Revision 3. The EGLE required one caveat to their published WRD Winter Construction Stormwater Policy. It is required that during the suspension of weekly inspections during the winter months, regardless of the temperature, sites must be inspected at least once every 30 days during the inactive period (subsection 3.1.7).

The FHWA and the EGLE has approved the updated version of the SESC Manual. The EGLE will issue a formal approval once approved by the EOC.

The updated SESC Manual and EGLE WRD policy has been provided for this agenda item.

Recommendation(s) – Approve latest revisions to the SESC Manual.

ACTION: Approved

8. Approve change of status for special provision for video inspection of underdrain to frequently used – David Gauthier

Issue Statement – Special provision for video inspection of underdrain.

Major Issue(s) – Expand the use of the special provision requiring video inspection of all newly installed foundation underdrain, bank underdrain, subbase underdrain, subgrade underdrain, open-graded underdrain, underdrain outlets and outlet endings to all projects with these items or work.

Background/History – At the January 4, 2018 EOC meeting, the concept of video inspection of underdrains was approved. At that time, the development a of pilot specification to be used in pilot projects was authorized. The special provision for video inspection of underdrains was created, reviewed, and approved. Once approved, it was distributed to the Joint Pipe Operations Committee, MITA, FHWA, and internally to appropriate staff for review and comment. Most of the comments received were for clarification. Those of a technical nature were addressed and, as necessary, implemented into the special provision. MITA had no issues with the special provision because there was a pay item for the work.

The special provision was piloted in at least one project in each region during the 2020 construction season. Following is some post construction feedback from industry and department staff on the use of the special provision:

Industry

MITA received feedback from five contractors, four of which supported it or were not opposed to it, and one provided some negative feedback. Following are specific comments provided by a few contractors:

"We found that this SP helped improve the quality of the Underdrain Installation. Our equipment allows us to track the camera head with a locating wand and find the problem areas much faster than in the past. Previously MDOT would videotape and give us a list of approx. stations or LF from an outlet. This was highly inaccurate and would take a significant amount of time to find the problem. This would also cause us to disturb more of the aggregate base than was really necessary. I trained some of our field employees on how to use the equipment and provided them with a clipboard to write down the video inspection work they completed (Station, Bound, Offset, Length and Notes). When I received it, I would enter this data into a spreadsheet to track the locations and footage. I would like to see more of this in future projects."

"The SP is fine, but they should clarify what is "crushed". When it was MDOT inspection, if the camera went through the pipe, it was fine. Other times some insist it is "deformed" pipe that has been flattened a little but is not crushed. It is so open ended with the last bullet point where they list "Other defects as determined by the engineer." That is extremely vague and open-ended."

One contractor stated "they are not in support of this SP moving forward on all projects and included coordination with the sub who did the work as a drawback. Also, per their experience, they anticipate the proposed SP will increase the costs overall on the project."

Department Construction Staff

"Is MDOT considering additional pilots? MTSC likes it and would like to include it on a reconstruct."

"Gaylord TSC would like to see the SP extended for use on other projects."

"My inspectors liked every part of this operation. The big issue before was getting MDOT staff on site when we needed it inspected. We really would like to use the SP again next season with our reconstruction project on I-196 and US-31."

"Challenges on this project:

- Contractor had the equipment in tool shed on site and would sometimes give short notice for the need to witness video inspection.
- Struggle to get log of video tape/photos/repairs

Advantages:

- Contractor had the equipment in tool shed on site. No need to wait on scheduling of others.
- Improved prime contractors scheduling with subcontractors, as prime was in control of videotaping.
- I am in favor of moving forward with the SP. As with all other construction aspects, a lot will depend on the contractor. Some are going to be better than others. Can we add to the SP that MDOT has the option at any point to perform QA video checks?"

"Noticed a greater urgency in the contractor protecting the underdrain. With the SP they knew it was going to be inspected. In year's past contractors knew there was a good chance the underdrain wasn't going to be video inspected or if it did it was only going to be a portion of what was placed. That's no disrespect towards Lansing but they simply didn't have the time to come and inspect ALL underdrain placed on projects."

"I did talk to George and he said our video inspection went very well that our contractor completed, and he recommends it on future projects. We would like to add it if we can."

"The SP worked out just fine from my perspective. It sure beats having to schedule the 1 MDOT inspector that covers all of Michigan for underdrain inspections putting the responsibility back onto the contractor which is always a plus! No bad or ugly on this one, just good in my eyes."

"As far as contractors' cooperation and ability to perform the work per SP, I don't have much input in terms of any adjustments or suggestions. It was all good in my eyes; I found no issues during the operation that would seem unfeasible or cause issues with the contractor. The contractor was cooperative and understood the key points regarding equipment and procedures as far as cable length the contractor had a cable that extended approximately 1148ft (350 meters), so the new requirement seems reasonable."

"There were no issues with the SP and the underdrain video inspection from my perspective...and what I mean there is that there was never an instance that I had to send any nasty grams or communicate anything to the contractor specifically regarding this item."

-End of Comments-

Overall, based on the comments provided, the piloted use of the special provision for video inspection of all underdrains was successful and well received. There was one somewhat negative comment by one contractor, but it seemed to be more of an issue with coordination with their subcontractor and not necessarily with the special provision.

One recurring comment was the convenience of the contractor having the equipment on site and they could schedule the inspection when needed and not wait on the single crew from Construction Field Services who is charged with covering all projects statewide. Having the

inspection equipment available as needed could potentially eliminate claims for extension of time if the contractor is waiting on department forces for this work.

The unit price for the video inspection ranged from \$0.40/lf to \$1.50/lf. It is concluded that the value of ensuring a functioning underdrain system outweighs the cost of inspection. Positive drainage within the pavement section is critical to maximize intended design life.

To date, there have been an additional half dozen requests to use the special provision again in a future project.

The approved version of the special provision for video inspection of underdrain is provided for this agenda item.

Recommendation(s) – Change the status of the pilot special provision for video inspection of underdrain to a frequently used special provision and include it in all projects with items of work for underdrain.

ACTION: Approved

9. Approve the MDOT Safety & Mobility Decision Tree and accompanying supporting guidance for inclusion into the Work Zone Safety Mobility Manual (WZSMM) – Lindsey Renner

Issue Statement – Approval of the content added to the WZSMM to support the MDOT Safety & Mobility Decision Tree, as well as the Decision Tree itself.

Major Issue(s) – The Work Zone Safety Task Force (WZSTF), in an attempt to better balance safety and mobility, has requested the creation of a flow chart that provides guidance to MDOT staff in prioritizing all road users, including road workers. In order for this flow chart to be utilized by MDOT staff it needs to be presented with accompanying guidance in an MDOT manual. The most appropriate place for this guidance is the WZSMM, which is expected to be updated in spring/summer of 2021. At this juncture, we would like to submit the material that allows this incorporation for review and consideration to the EOC.

Background/History – Due to the fact that this Decision Tree and its accompanying processes changes the way that MDOT designers make and document their decisions (and that MDOT construction forces interpret acceptable Maintenance of Traffic (MOT) schemes requested in post-let scenarios), it is prudent that this topic go to the EOC for review. WZSMM updates traditionally go through the EOC for any new or revised content that changes roles or responsibilities.

Decision Tree 4-15-21.pdf for proposed inclusion into WZSMM was provided at the meeting.

Please see below text for inclusion into WZSMM or navigate to the shared drive to see comments received and collaboration on this document:

Decision Tree Justification Process

The MDOT Safety & Mobility Decision Tree was created to ensure that MDOT considers safety of all road users, including road workers, in Maintenance of Traffic decisions. This Decision Tree encourages the use of Detours, crossovers, and positive protection to safely guide traffic through the work zone and past work crews as they engage in rebuilding, repairing, and/or maintaining our infrastructure.

Use of the Decision Tree is mandatory for all MDOT projects on existing 70 mph or greater posted roadways, with optional use for all other projects. This flowchart is to be used to evaluate MOT options and promote a culture of safety for all. The Decision Tree should be used in conjunction with engineering judgement, as it is documented that the use of these MOT concepts may be difficult to apply typically statewide and may have regional considerations that must be evaluated.

In some scenarios, it may not be practical for a project office to follow the specific guidance as listed in the MDOT Decision Tree. The Work Zone Management Unit (WZMU) is required to report these deviations from the Decision Tree monthly to the Work Zone Safety Task Force, composed of MDOT employees, MITA members, and consultants. For this reason, the Decision Tree Justification process has been established to address Project office deviations in the following circumstances:

- When a detour is practical, but is not utilized
- When a crossover is practical, but is not utilized
- When night work is performed without positive protection

When the decision is made to deviate in these ways, it is expected that the Base Plan Meeting or Plan Review Meeting would include a discussion about the alternatives considered and the reasons for deviation from the Decision Tree. Upon the commencement of this conversation, the project manager must develop a memorandum explaining why the Decision Tree was not practical for the purposes of this project. This memo must be approved by the traffic and safety engineer or the operations engineer from the region and sent to the region engineer for the respective region, as well as the field operations engineer in the WZMU within seven (7) calendar days of the Base Plan Review Meeting or Plan Review Meeting for monthly reporting, and also copied to the project file in the Supporting Documents file in ProjectWise. The memorandum must include:

- Job number
- Route
- Work type
- Expected letting date
- MOT alternative selected
- MOT alternative predicated by the Decision Tree
- Rationale for selected MOT alternative

• Additional items included in the project to enhance work zone safety (if applicable)

For MDOT projects on existing 70 mph or greater roads, any changes to MOT that are requested after project award which change the scope of MOT (in a manner that deviates from either that suggested by the Decision Tree or that accepted during Base Plan Review or Plan Review Meeting) should be communicated in writing to the WZMU for compilation and stored in the Supporting Documents file in ProjectWise.

Creation of this document is intended to add value and guide our thinking process as we balance safety and mobility. As such, the MDOT Safety & Mobility Decision Tree and this justification process will be iterative with reassessment at six (6) months and 12 months from publication in this manual based on our lessons learned.

Recommendation(s) – Approve the MDOT Safety & Mobility Decision Tree and accompanying supporting guidance for inclusion into WZSMM for a period of up to 12 months, with the understanding that lessons learned from this endeavor will be incorporated into future editions of the WZSMM and the Decision Tree itself.

Status – The MDOT Safety & Mobility Decision Tree has been presented and a multiple comment opportunities provided to the following groups:

- Work Zone Business Team (WZBT)
- Traffic and Safety Statewide Alignment Team (TSSAT)
- Statewide Design Alignment Team (SDAT)
- Statewide Alignment Construction Team
- Associate Region Engineer Development and System Managers Team
- Work Zone Safety Task Force group, including contractors, consultants and MITA employees

Comments that were received were addressed.

In addition to this, the supporting text (above) that was proposed for inclusion into the WZSMM was presented for comment to the WZBT, TSSAT and SDAT. The text submitted reflects the comments received as of close of business on the due date of agenda topics. A fully updated version will be brought to the EOC meeting.

ACTION: Approved

10. Updated 'MDOT Widened Slab Guidance' and accordingly add this to the appropriate MDOT literature, MDOT Road Design Manual (Chapter 6) - Justin Schenkel

Issue Statement – Updated the 'MDOT Widened Slab Guidance' as agreed to by MDOT industry partners and MDOT personnel, including those from the central office and regions. Specifically, this update adds another project consideration to potentially omit the widened slab use for projects which have a significant length of weave/merge lanes.

Major Issue(s) – Updated the 'MDOT Widened Slab Guidance' as agreed to by MDOT industry partners and MDOT personnel, including those from the central office and regions.

Background/History – The EOC previously approved the 'MDOT Widened Slab Guidance' in November 2020. This guidance is intended to formalize the MDOT use of concrete pavement widened slabs and improve statewide consistency. Accordingly, MDOT has started to implement the guidelines, but has recently come across some projects for which it may be beneficial to omit the use of the widened slab. Specifically, these projects are those which are highly urbanized that have a significant length of weave/merge lanes. The issue is that if widening, the widened mainline slab extends into these auxiliary lanes, so the left wheel path (in these lanes) is very close to the pavement edge (and at odds with edge stress reduction). Alternatively, if gapping out the widening in these locations, then a significant portion of the project is not widened. Moreover, having multiple pavers available for variable widths at limited locations may not be practical and adds design/construction confusion. Therefore, the following note is recommended to be included in the list of project/roadway attributes to use a 14' widened concrete slab:

• Significant length of weave and/or merge lanes adjacent to the truck lane are not present or planned.

This recommended change was reviewed and accepted by the MDOT Pavement Management team, region personnel, and MDOT industry partners.

In its entirety, the recommended guidance would be as follows:

Widened Slab

If appropriate, MDOT may use a 14-foot widened outside slab (truck lane). The widened slab is intended to reduce stresses and deflections at the outside longitudinal concrete pavement edge caused by vehicle tires running on or near the edge. Widened slabs may also reduce the amount of shoulder maintenance. While widened concrete slabs can be beneficial, they may also be susceptible to longitudinal cracking if the pavement thickness is too thin. Therefore, MDOT recommends using a 14' widened concrete slab when the roadway has all of the following attributes:

- Is a new/reconstruct project.
- Is a freeway.
- Allowable width for widening (i.e., not constrained by curb or right-of-way).
- Additional outer lanes are not currently planned.
- Significant length of weave and/or merge lanes adjacent to the truck lane are not present or planned.
- The concrete pavement thickness is 9.5" or greater.
 - If the pavement thickness is less than 9.5", but a HMA shoulder is planned, then consider widening with a slab width of 13'.

Recommendation(s) – Approval of the updated 'MDOT Widened Slab Guidance' and accordingly add this to the appropriate MDOT literature, MDOT Road Design Manual (Chapter 6).

ACTION: Approved

11. Proposed Pavement Demonstration project for westbound US-10 from 7 Mile to west Bay City Limits – Justin Schenkel

Issue Statement – Obtain the EOC approval of the Pavement Demonstration Program project JN 201403, US-10 WB from 7 Mile Road to west Bay City limits in Bay County.

Major Issue(s) – To approve the following job for the Pavement Demonstration Program:

- JN 201403, US-10 WB from 7 Mile Rd to west Bay City limits in Bay County (scheduled let date of 12/02/2022)
 - Hot mix asphalt (HMA) reconstruction on reduced base/subbase demonstration project

Background/History – Public Act 457 of 2016, MCL 247.651i allows MDOT to construct demonstration projects that are not subject to a LCCA. The LCCA process is a tool to select the lowest cost pavement design over the expected service life of the pavement. The LCCA process must include, by law, historical information for initial construction and maintenance costs, and performance (service life). This information is not available for new pavement design types and new pavement technologies and thus they cannot be used in the pavement selection process until the information has been obtained. Therefore, the pavement demonstration legislation provides a means for trying new and innovative ideas.

Potential outcomes of pavement demonstration projects include increased service life, improved customer benefits and lower maintenance costs. Future LCCAs may utilize cost, performance, and maintenance information from the demonstration projects.

Selection of candidate projects is a collaborative effort among MDOT CFS pavement personnel, MDOT region personnel and pavement industry groups. Once the demonstration project is identified, it goes to MDOT's EOC for formal approval. Once approved, the project becomes part of the Pavement Demonstration Program. All costs for the demonstration project are funded by the respective MDOT region's rehabilitation and reconstruction budget. Per Public Act 457 of 2016, MCL 247.651i the department should balance the costs of asphalt and concrete demonstration projects so that the cost of each type is within 25 percent of each other over a three-year period.

The "HMA reconstruction on reduced base/subbase" demonstration concept is one of the design concepts as agreed to by the newly established 'Pavement Demonstration Oversight Committee' which is comprised of MDOT CFS, APAM, and MCA personnel. The MDOT EOC has previously granted less thickness base/subbase for particular alternate pavement

bidding situations, but this has not been extensively applied or studied. Therefore, the objective of this concept is to determine if the standard base and subbase thicknesses for HMA reconstruction can be reduced and if so, for what climate, vehicle volumes, and/or subgrade types. As a result, the expected outcomes are potential guidance and/or standard modifications.

This project, JN 201403, US-10 WB is recommended to demonstrate this concept because it is a suitable candidate that has existing subbase to make reuse of and adequate subgrade support. Additionally, it is expected to improve the project maintenance of traffic and improve construction operations. The project and its potential use for the demonstration program has been reviewed and approved by the associated Transportation Service Center, region, central office, and pavement industry partners. For further details, the current pavement design cross-sections and demonstration subsection locations are shown in the spreadsheet attachment shared at the meeting, 'DRAFT-US10 WB Pavt Demo Limits CrossSections-201403(4.13.21).' Note that these pavement thicknesses and/or mixes may slightly change as this project is finalized, but the overall concept, base/subbase thicknesses, and approximate subsection locations will remain the same.

Recommendation(s) – Recommend approval of the proposed Pavement Demonstration Project for JN 201403 on westbound US-10.

Subsequently, if this project is approved by the EOC, a follow-up informational EOC agenda item will be submitted to present the formal evaluation plan for this demonstration project.

ACTION: Approved

Digitally signed by:

Carol Aldrich

Date: 2021.06.01 10:15:

Carol Aldrich, Secretary

Engineering Operations Committee

RA:lrb

cc:	EOC Members	C. Libiran (MDOT)	R. Brenke (ACEC)
	Meeting Guests	R. Lippert (MDOT)	G. Bukoski (MITA)
	Region Engineers (MDOT)	L. Mester (MDOT)	D. DeGraaf (MCA)
	Assoc. Region Engineers (MDOT)	C. Newell (MDOT)	C. Mills (APAM)
	TSC Managers (MDOT)	T. Schafer (MDOT)	D. Needham (MAA)
	L. Doyle (MDOT)	R. Jorgenson (FHWA)	M. Ackerson-Ware (MRPA)